

EXHIBIT A

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Establishing Just and Reasonable Rates for Local Exchange Carriers)	WC Docket No. 07-135
)	
High-Cost Universal Service Support)	WC Docket No. 05-337
)	
Developing a Unified Intercarrier Compensation Regime)	CC Docket No. 01-92
)	
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
)	
Lifeline and Link-Up)	WC Docket No. 03-109
)	
Universal Service Reform — Mobility Fund)	WT Docket No. 10-208
)	

DECLARATION OF PETER COPELAND

1. My name is Peter Copeland. I am employed as Director of Regulatory Operations at CenturyLink. My business address is 1801 California Street, Denver, CO 80202. In my thirty years at CenturyLink, I have worked extensively on economic cost modeling related to the provision of telecommunications services, including mobile wireless services. I have a Master's degree in Public Administration.

2. In this declaration, I describe the methodologies used to identify geographic areas in CenturyLink's serving territory where broadband services are provided only by a wireless

Internet service provider (WISP),¹ and that WISP appears to lack the ability to serve all of the potential subscribers in that area with broadband services of reasonable quality at a reasonable price. More specifically, we identified 55 unique WISPs in CenturyLink's service territory where at least one of three conditions applies:

- The WISP's coverage area portrayed in the National Broadband Map (NBM) is highly implausible, given line-of-sight and power restrictions, and that area is located in a state that, to our knowledge, has not independently verified WISP coverage areas shown in the NBM;
- The WISP, like satellite broadband providers, imposes substantially higher retail prices or more stringent data caps than CenturyLink does; or
- The WISP provides broadband services only to business customers.

Methodology for Evaluating WISPs' Coverage

3. Our analysis began with the more than 700 WISPs providing broadband service in CenturyLink's service territory according to the National Broadband Map.² The analysis focused on those geographic areas in CenturyLink's territory where the NBM shows that WISP-provided broadband services are the only broadband services available today. We further narrowed the analysis to certain states that, to CenturyLink's knowledge, did not confirm the accuracy of the WISP service areas reported in the NBM: Arizona, Colorado, Florida, North Dakota, Oregon and Washington.

4. For each WISP serving one or more of these areas, we downloaded the coverage area maps from the latest release of the NBM. We identified a WISP's coverage area as implausible if it met at least one of two conditions: (1) any portion of the WISP's coverage area is continuous and uninterrupted for a distance of greater than 10 miles (*i.e.*, a circular area with a

¹ Some areas are served by two or more WISPs. A geographic area is included in CenturyLink's petition for waiver only to the extent *each* WISP serving that area meets at least one of the conditions noted below.

² See <http://www.broadbandmap.gov>.

radius of 5 miles), or (2) the coverage area is continuous and uninterrupted despite the existence of mountainous and/or hilly terrain. Both of these conditions are rooted in the characteristics of the frequency spectrum typically used by WISPs.

5. In general, WISPs provide their services using unlicensed or lightly licensed spectrum in the ISM (900 MHz and 2.4 GHz) and UNII (5 GHz) bands. These frequencies are used for other electronic devices as well, including conventional Wi-Fi, cordless phones and baby monitors. These frequency bands also suffer from two significant technical constraints. First, particularly at higher frequencies, this spectrum requires near “line of sight” conditions to propagate well. In other words, any significant obstruction—a hill, a building, a tree—between the transmitting antenna and a receiving antenna will block the transmission and most likely require additional designs, construction and equipment for the WISP to serve obstructed customers. Moreover, even with these accommodations, which frequently will not be economically feasible to deploy in order to serve a small number of customers, the WISP’s coverage will be imperfect. Second, like all RF transmissions, the WISP’s service attenuates with distance. Unlike licensed spectrum, however, the unlicensed and lightly licensed spectrum used by WISPs is subject to low power limits, further constraining the distance their service can be transmitted.

6. Given these line-of-sight and power limitations, a WISP’s purported coverage area in the NBM is highly suspect if it shows continuous, uninterrupted coverage over long distances. Indeed, most WISPs have “scattershot” coverage areas in the NBM, reflecting the fact that there are certain customers in those areas that they cannot reach. For purposes of this analysis, we identified a coverage area as implausible if it was uninterrupted in a circular area with a diameter of more than 10 miles, which would equate to a cell site that could serve a radius of 5 miles. Even within overlapping cell sites, one would reasonably expect there to be some locations

lacking coverage. We also identified a WISP's coverage area in the NBM as implausible if it shows uninterrupted coverage in mountainous or hilly areas, where it is not feasible for a WISP to provide ubiquitous coverage.

7. Exhibit D to the Petition displays coverage area maps for each of the 43 WISP coverage areas found to have implausible coverage in the NBM. The areas served by these WISPs contain approximately 48,639 unadjusted living units³ that could be served by CenturyLink with CAF Phase I incremental support if they were treated as unserved for purposes of the Phase I funding mechanism. Those WISPs are identified in Exhibit C to the Petition.

Methodology for Evaluating WISP Prices and Data Caps

8. In the second part of our analysis, we again focused on those geographic areas in CenturyLink's territory where WISP-provided broadband services are shown on the NBM as the only broadband services available today. Of the WISPs serving those areas, we identified those providers that, like satellite broadband providers, impose substantially higher retail prices or more stringent data caps than CenturyLink does. To the extent possible, we conducted this analysis for each of the more than 700 WISPs that operate in CenturyLink's service territory according to the NBM.

9. We began by gathering pricing and data cap information from each WISP's website that contained such information. In terms of price, we computed the total price that a customer of the WISP would pay for broadband service in the first year, including all recurring and non-recurring charges. If the total price exceeded \$720, we concluded that the WISP is not offering broadband service at a reasonable price. This pricing threshold was chosen for two reasons. *First*, it is significantly higher than the total price of \$540 that a customer would pay for

³ Unadjusted living units are the total living units in each WISP coverage area within CenturyLink's service territory.

standalone broadband service from CenturyLink without any contractual commitment.

Throughout its serving territory, CenturyLink offers standalone DSL service of 1.5 mbps for \$40 per month, with another \$4.95 for rental of a modem.⁴ There is no installation charge if the customer self-installs the broadband modem, which most customers do.⁵ *Second*, a total price of \$720 is similar to that charged by satellite broadband providers.

10. We conducted a similar review of data caps imposed by WISPs. Many WISPs note on their website that they have a monthly data cap, but do not specify the level of that cap. Of those that do disclose the level of their cap, we noted those that impose monthly data caps less than or equal to 25 GB per month. We chose this threshold because it is equivalent to the most generous monthly data cap for WildBlue's satellite broadband service.⁶ This compares to a monthly data cap of 150 GB per month for CenturyLink's 1.5 Mbps service and 250 GB per month for plans greater than 1.5 Mbps.⁷ Less than 0.5 percent of CenturyLink's broadband customers are expected to exceed the download usage limits provided with their monthly plan.⁸

11. Of the more than 700 WISPs operating in CenturyLink's service territory, we identified 31 WISPs with total annual broadband rates exceeding \$720 or monthly data caps of less than 25 GB per month. The areas served by these WISPs contain approximately 34,873 unadjusted living units that could be served by CenturyLink with CAF Phase I incremental support if they

⁴ See CenturyLink website, available at <http://www.centurylink.com/home/internet/> (under "See Important Details" link) (website reviewed June 25, 2012). The vast majority of CenturyLink customers benefit from lower promotional and/or bundled rates. See *id.*

⁵ To install the modem, the customer plugs in the modem and loads certain software on his or her computer. If the customer chooses to have the modem installation done by a CenturyLink technician, the standard charge is \$49.95. Almost all of CenturyLink's customers opt for self-installation.

⁶ See WildBlue website, available at <http://get.wildblue.com/pricing.html> (website reviewed June 25, 2012).

⁷ See CenturyLink website, available at <http://www.centurylink.com/Pages/AboutUs/Legal/InternetServiceManagement/> (website reviewed June 25, 2012).

⁸ See CenturyLink website, available at <http://www.centurylink.com/Pages/AboutUs/Legal/InternetServiceManagement/> (website reviewed June 25, 2012).

were treated as unserved for purposes of the Phase I funding mechanism. Those WISPs are identified in Exhibit B to the Petition.

Methodology for Identifying Business-Only WISPs

12. The third part of our analysis again focused on those geographic areas in CenturyLink's territory where WISP-provided broadband services are the only broadband services identified in the NBM as available today. Of the WISPs serving those areas, we identified six WISPs that, according to their websites, offer broadband services only to business customers. The areas served by these WISPs contain approximately 4,304 unadjusted living units that could be served by CenturyLink with CAF Phase I incremental support if they were treated as unserved for purposes of the Phase I funding mechanism. Those WISPs are identified in Exhibit B to the Petition.

Summary of Analysis

13. Accounting for overlaps, our analysis identified a total of 55 unique WISPs that meet at least one of the following three conditions: (1) implausible coverage areas in the NBM in a state that, to our knowledge, has not independently verified WISP coverage areas shown in the NBM, (2) substantially higher retail prices or more stringent data caps than those for CenturyLink's for broadband services, or (3) broadband service available only to residential customers. These areas contain about 42,000 adjusted living units⁹ that could be served by CenturyLink with CAF Phase I incremental support if they were treated as unserved for purposes of the Phase I funding mechanism. These data are summarized in Exhibits B and C to the Petition.

⁹ Adjusted living units are the total living units within the coverage area of a WISP which fails one of the three tests, adjusted for any overlap of the coverage areas of WISPs, which do not fail any of the three tests, and that are within CenturyLink's service territory.

I declare that the foregoing is true to the best of my knowledge, information, and belief.

Pete Copeland

Executed on June 26, 2012